

Customer No.: 31561  
Application No.: 09/859,542

### REMARKS

#### Present Status of the Application

The Office Action rejected claims 1 and 3-7. Specifically, the Office Action rejected claims 1 and 3 under 35 U.S.C. 103(a) as being unpatentable over Matono et al. (U. S. Patent 6,344,857; hereinafter Matono) in view of Takayama (U. S. Patent 6,317,157). In addition, the Office Action rejected claims 4-7 under 35 U.S.C. 103(a) as being unpatentable over Matono in view of Takayama and Applicant's Admitted Prior Art (AAPA). Applicants have amended claims 1 and 4. No new matter adds. After entry of foregoing amendments, claims remain pending in the present application, and reconsideration of those claims is respectfully requested.

#### Discussion of Claim Rejections under 35 USC 103

The Office Action rejected claims 1 and 3 under 35 U.S.C. 103(a) as being unpatentable over Matono in view of Takayama. The Office Action rejected claims 4-7 under 35 U.S.C. 103(a) as being unpatentable over Matono in view of Takayama and AAPA. Applicants respectfully traverse the rejections for at least the reasons set forth below.

1. With respect to claim 1 and 3, it should be noted that the further correction, *referred to anti compensation process*, based on the gray level in the present invention is not disclosed by Matono. The gray level/brightness is a function of gamma value (see eq. (3); FIG. 4).

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As recited independent claim 1, two gamma values are used, in which the first gamma value is used to perform the usual gamma correction. Then, based on the gray levels of the results for the segments using the first gamma values, at least one segment of the video signal is performed by the *anti-compensation process* with a smaller gamma value when the gray level of the segments is in a range of first gray level. Therefore, the step (a) is rather a usual gamma correction based on first gamma value. Then, step (c) is an anti compensation process based on a smaller gamma value for at least one segment of the video signal in gray level.

In re Mantono, Mantono (col. 3, line 52 – col. 4, line 6) discloses the rather typical gamma correction but not disclose the anti compensation process.

Fig. 2 of Mantono discloses the gamma curve for G, R, B. Each of the gamma curves at a present gamma value is described by three bits in eight segments. The process of Mantono is known as the usual gamma correction, or gamma compensation process as recited in step (a) in independent claim 1.

Mantono failed to disclose the *anti* compensation process, performed on at least a portion of the segments (based on the gray level) by applying a smaller second gamma value.

Applicants respectfully disagree the statement of the first paragraph in page 3 of the Office Action. The Office Action states that the blue color uses the smaller gamma value. However, this not true, respectfully, or not what the anti-compensation process as recited in independent

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claim 1.

In other words, the anti compensation process is not based on relation between R, G, B but based on the gray level after the first stage of gamma correction in step (a).

In re Takayama, Takayama discloses the image conversion apparatus. In Fig. 1 (col. 6, lines 16-27), since the first gamma correction 100 performs the inverse gamma correction on the input video signal, the second gamma correction is necessary to convert back. Takayama also failed to supply the missing features in Manton to achieve the present invention.

With respect to claim 3, the third gamma is further used in the anti compensation process for the segments in the range of the second gray level.

Manton and Takayama either alone or in combination do not disclose the full features as recited in independent claim 1 and dependent claim 3.

2. With respect to claims 4-7, with at least the foregoing reasons applied to independent claim 1, Manton and Takayama failed to disclose the features in claims 4-7.

Further, AAPA does not disclose the missing features in Manton and Takayama either.

As discussed above, the gamma compensation process use the first gamma = 2.2. Then other different gamma values can be used to perform the other corresponding anti compensation processes on the corresponding segment based on range of the gray level.

AAPA does not disclose the anti compensation process as recited in claims 4-7, and does

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not provide the missing features in Manton and Takayama.

For at least the foregoing reasons, Applicant respectfully submits that independent claim 1 patently defines over the prior art references, and should be allowed. For at least the same reasons, dependent claims 3-7 patently define over the prior art references as well.

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**CONCLUSION**

For at least the foregoing reasons, it is believed that all the pending claims 1 and 3-7 of the invention patently define over the prior art and are in proper condition for allowance. If the Examiner believes that a telephone conference would expedite the examination of the above-identified patent application, the Examiner is invited to call the undersigned.

Respectfully submitted,

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Dec. 23, 2004Belinda Lee

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